



*To print:* Select **File** and then **Print** from your browser's menu

-----  
This story was printed from [News](#),  
located at <http://www.greenbiz.com/news/>.  
-----

## **San Diego Mayor Flips Solar Switch on 'Green' Municipal Building**

Source [GreenBiz.com](http://www.GreenBiz.com)

URL: [http://www.greenbiz.com/news/news\\_third.cfm?NewsID=25128](http://www.greenbiz.com/news/news_third.cfm?NewsID=25128)

SAN DIEGO, Calif., June 30, 2003 - San Diego Mayor Dick Murphy has officially commissioned the city's most energy-efficient and environmentally sensitive municipal structure, the solar-powered Ridgehaven "Green" Building. Ridgehaven's solar array features a state-of-the-art solar electric rooftop and carport system which generates approximately 53 kW daily and is enough energy to power more than 70 homes during the day.

"Pursing energy independence is one of my 10 goals for the City of San Diego and our use of solar power is paving the way to achieving this goal as well as saving operating costs," said Mayor Murphy. "Through the installation of the solar array on the Ridgehaven Building, the City will save \$11,600 or more each year and potentially as much as \$300,000 during the life of the solar array. With more efficient "green" buildings like Ridgehaven, we can improve building environments, conserve natural resources, and enhance our quality of life, thus ensuring an environmentally sustainable future."

In 1996, the city completed an extensive two-year energy-efficient retrofit and remodel on the Ridgehaven "Green" Building which transformed it into one of the nation's most energy-efficient buildings today. In 1999, after operating for three years as the headquarters to the city's Environmental Services Department, it was selected as the first building in the nation to earn the U.S. Department of Energy's and the EPA's prestigious Energy Star label. Since the original retrofit, the building's energy use has reduced by 69% and with the addition of the new solar electric system Ridgehaven will now be approximately 83% more energy efficient than before.

The Ridgehaven's Building's 6,500 square foot solar array makes innovative use of unused assets -- the building and carport rooftops -- to generate on-site electricity. Ridgehaven's solar power system, produced by the PowerLight Corporation, is comprised of 442 solar electric panels on the building's rooftop that generate 50 kW and 96 solar electric panels on the carport that generate 3 kW. The solar array will produce a projected annual electrical output of 80,702 kWh and will provide 14% of the facilities' energy needs throughout the year including times of highest demand such as the hot summer months.

In addition to generating electricity, the rooftop system is virtually maintenance free and will provide insulation for the Ridgehaven Building which will help reduce the cost of heating and air conditioning. The rooftop array also serves as protection for the roof, thus

decreasing the need for repairs.

Ridgehaven's newly installed solar array will also offer many environmental benefits during its projected lifetime of 25 years. During the life of the system the amount of solar electricity generated will reduce emissions of carbon dioxide by almost 480 tons which is equivalent to planting almost 135 acres of trees, removing almost 100 cars, or not driving 1.2 million miles on the San Diego roadways.

"Upfront costs to install solar panels are significant and the payback period can be as long as 25 years but I believe it is a wise use of city dollars," said Murphy. "There is a limited supply of fossil fuels and burning these fuels can have enormous long-term damaging impacts on our air quality. When you measure potential costs associated with managing future health problems that could arise from decreased air quality to the dollars we spend now to install solar electric systems that will not produce harmful emissions, it is clear this investment will be less costly and have huge long-term benefits."

The installation of the Ridgehaven Building's solar electric system marks it as the city's second facility to be fitted with a solar array and generate on-site electricity. In October 2002 the Miramar Operations Station administration building was the city's first building to be converted to function entirely on solar powered generated on-site. This building's carport was fitted with 468 solar electric panels which generate more energy than the building uses in one year and saves the city approximately \$16,500 in operational costs.

City officials hope the use of solar electricity will help increase the reliability of the region's electric system by diversifying the power supply, offsetting peak demand, and shielding San Diego from price volatility. Solar transforms sunshine into electricity during the day -- when it's needed most, when it's most costly and when the grid is under the greatest constraints.

The new Ridgehaven solar array is funded in part with incentives provided by the California Energy Commission's Emerging Renewables program. The city will receive \$283,363 for the installation of the Ridgehaven solar array and \$275,760 for the Miramar Operation's Station solar carport installation.

**[Back to "news section"](#)**